LOPATO, G.A., inzh.

Designing bevel gear pairs with curcular equal-height teeth. Vest. mash. 38 no.4:27-33 Ap '58. (MIRA 11:3)
(Gearing, Bevel)

BELYNSKIY, V.V., inzh.;DOLKART, V.M., inzh.; KAGAN, B.M., kand. tekhn. nauk; LOPATO, G.P., inzh.; MATYUKHIN, N.Ya., inzh.; BRUK, I.S., red.; MORDVINOVA, N.P., inzh., ved. red.; SHTEYNBOK, G.Yu., inzh., red.; FOMICHEV, P.M., tekhn. red.

[Small M-3 electronic computer] Malogabaritnaia elektronnaia vychislitel'naia mashina M-3. Moskva, Filial Vses. in-ta nauchn. i tekhn. informatsii, 1957. 86 p. (Peredovoi nauchno-tekhnicheskii i proizvodstvennyi opyt, tema 40) (MIRA 14:11)

1. Chlen-korrespondent AN SSSR (for Bruk).
(Electronic calculating machines)

BRUK, I.S.; MATYUKHIN, N.Ya., inzh.; BELYNSKIY, V.V., inzh.;
IOSIF'YAN, A.G., akademik; KAGAN, B.M., kand.tekhn.nauk;
DOLKART, V.M., inzh.; LOPATO, G.P., inzh.

M-3 small-sized universal electronic digital computer.
Elektrichestvo no.1:49-54 Ja '58. (MIRA 11:2)
(Electronic calculating machines)

ACC NR: AP7003010 SOURCE CODE: UR/0413/66/000/024/0157/0157

INVENTORS: Raykhman, Ya. A.; Gol'dberg, V. K.; Kirilyuk, N. I.; Lopato, G. P.; Buznikov, Yu. N.; Shilik, K. K.

ORG: none

TITLE: Electronic logic unit - Logikon. Class 42, No. 150302

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 24, 1966, 157

TOPIC TAGS: logic element, electron beam, electron accelerator

ABSTRACT: This Author Certificate presents an electronic logic unit - logikon, which utilizes the switching properties of the trochoidal electron beam of a ring trochotron. To increase the response rate and to widen the logic possibilities, an electrode for switching the beam according to the input signal is placed in each chamber of the ring trochotron. To decrease the weight and dimensions, the container is made of magnetized ferroceramic.

SUB CODE: 09/ SUBM DATE: 23Nov59

Card 1/1

L 14965-65 EWG(j)/EWT(m)/EPF(c)/EPR/EWP(t)/EWP(b) Pr-4/Ps-4 RDW/JD/MLK

ACCESSION NR: AT4048709 S/0000/64/000/000/0155/0158

AUTHOR: Tresvyatskiy, S. G.; Lopato, L. M.

TITLE: The phase diagram of the lanthanum oxide-MgO system

SOURCE: Vsesoyuznoye soveshchaniye po splavam redkikh metallov, 1963. Voprosy* teorii i primeneniya redkozemel'ny*kh metallov (Problems in the theory and use of rare-earth metals): materials [illegible]

of rare-earth metals); materialy* soveshchaniya. Moscow, Izd-vo Nauka, 1964, 155-158

TOPIC TAGS: lanthanum oxide, magnesium oxide, phase diagram, rare earth oxide

ABSTRACT: The phase diagram of the La_2O_3-MgO system has not previously been investigated, only the fusion curve for this system having been found. In the present study, samples of MgO and La_2O_3 were calcined at 1000C. The mixture was then triturated in an agate mortar and put into a furnace at 1200-1300C for 2 hours; this process was repeated three times. The system was investigated by annealing and hardening in a furnace with a graphite heater in purified argon, samples being melted in molybdenum crucibles (d=8 mm, h=2-3 mm, wall depth=0.2 mm). In some cases, tungsten crucibles were used. Since the tested oxides crystallize rapidly, the annealing lasted

Card 1/3 [illegible] not lead to the formation of new phases, and only

L 14965-65
ACCESSION NR: AT4048709

the grain size increased. When the compound had a melting temperature above 2500C it was not fused. Annealing in these cases was carried out for 10 min. above the solidus temperature. Phase analysis was done by X-ray and microstructural methods.

ASSOCIATION: none

SUBMITTED: 13Jun64 ENCL: 01 SUB CODE: MM

Card 2/3 NO REF SOV: 002 OTHER: 006

ENCLOSURE: 01

L 14065-65
ACCESSION NR: AT4048709

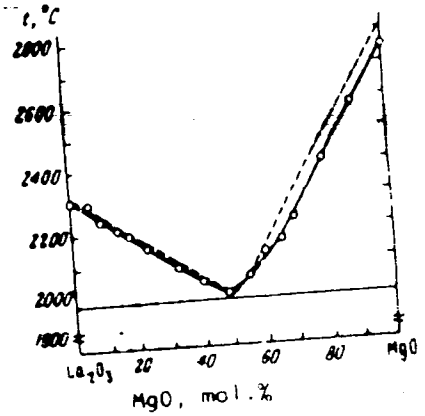

Fig. 1. Phase diagram of the system MgO-La_2O_3 according to the data of the authors: --- calculated; ____ experimental; x - melting point of the alloys according to

mental; [illegible] visual observations.

Card 3/3

L 41237-65
ACCESSION NR: AP4046741

4

systems formed by yttrium and scandium oxides with beryllium, magnesium, calcium, strontium and barium oxides. Orig. art. has: 1 figure and 1 table.

ASSOCIATION: Institut problem materialovedeniya AN UkrSSR (Institute of the Study of Problems of Materials, Academy of Sciences UkrSSR)

LOPATO, L.M.; YAREMENKO, Z.A.; TRESVYATSKIY, S.G. [Tresviats'kyi, S.H.]

Interaction of rare-earth oxides with strontium oxide.
Dop. AN URSR no.11:1493-1497 '65. (MIRA 18:12)

1. Institut problem materialovedeniya AN UkrSSR.

L 12057-66 EWT(1)/EWT(m)/T/EWP(t)/EWP(b)/EWA(c) IJP(c) JD/JG

ACC NR: AP6001303 SOURCE CODE: UR/0363/65/001/008/1368/1371

AUTHOR: Lopato, L. M.; Yaremenko, Z. A.; Tresvyatskiy, S. G.

ORG: Institute of Materials Science Problems, Academy of Sciences UkrSSR (Institut problem materialovedeniya Akademii nauk UkrSSR)

TITLE: Study of the optical properties of compounds formed in the systems Ln_2O_3-SrO and Ln_2O_3-BaO

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 8, 1965, 1368-1371

TOPIC TAGS: crystal optic property, strontium compound, barium compound, samarium compound, europium compound, gadolinium compound, terbium compound, dysprosium compound, yttrium compound, erbium compound, thulium compound, scandium compound, lutetium compound

ABSTRACT: The optical properties of crystals of type $SrLn_2O_4$ and $BaLn_2O_4$, where Ln = Sm, Eu, Gd, Tb, Dy, Y, Er, Tm, Lu, and Sc, were studied on powders by the immersion method and on polished sections. The refractive indices of $SrLn_2O_4$ where Ln = Sm, Eu, Gd, Tb, Dy, Sc were within the range of values exhibited by the original oxides, whereas the refractive indices where Ln = Y, Ho, Er, Tm, Yb, Lu were higher by an average of 0.04. This indicates that the crystal lattices of these two sets of compounds differ in some respects,

Card 1/2 UDC: 546.65'431 + 546.65'42

L 12057-66

ACC NR: AP6001303

even though the structural type is the same. The crystal-optical characteristics show that these compounds belong to the calcium ferrite type. On the basis of the data, the existence of a new type of substructures is postulated for compounds of this class. These substructures belong to the rhombic class of symmetry, but have a hexagonal-type unit cell. Orig. art. has: 1 figure and 3 tables.

SUB CODE: 07, 11/ SUBM DATE: 01Apr65 / ORIG REF: 002 / OTH REF: 007

Rare Earth elements 55, 07

Card 2/2

ACC NR: AP5028715 EWT(m)/EWP(w)/EWP(v)/T/EWP(t)/EWP(k)/EWP(b)/EWA(c) IJP(c) JD/HM

SOURCE CODE: UR/0363/65/001/011/1878/1882

AUTHOR: Tresvyatskiy, S. G.; Yaremenko, Z. A.; Lopato, L. M.; Sokolovskiy, V. A.; Karpenko, V. Ya.

ORG: Institute of Materials Science Problems, Academy of Sciences SSSR (Institut problem materialovedeniya Akademii nauk SSSR)

TITLE: Some physicochemical properties of synthetic periclase single crystals

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 11, 1965, 1878-1882

TOPIC TAGS: magnesium oxide, single crystal, optic crystal

ABSTRACT: The microhardness, microbirttleness, chemical stability, transmission spectrum, and working of synthetic magnesium oxide (periclase) single crystals were studied. The crystals are characterized by microhardness isotropy which amounts to 926-946 kg/mm. They are more stable to attack by acids and molten alkali metals than are polycrystals or sintered MgO. Single-crystals plates can be diffusion-welded at 1800-2000°C with a holding time of 30 to 60 min, and the welding seam obtained is optically transparent. Heat shock causes splitting of the single crystals along the cleavage plane. MgO single crystals are suitable materials for preparing optical windows, lenses, and prisms for the 0.3-7.0 μ spectral range not only at low but pro-

Card 1/2

UDC: 546.46:548.55

L 10856-66

ACC NR: AP5028715

bably also at high temperatures as well. This must be verified by further studies. Objects made of MgO can be polished by combining mechanical and chemical methods of treatment. Orig. art. has: 5 figures, 1 table.

SUB CODE: 11,07/ 20 SUBM DATE: 24Apr65/ ORIG REF: 002/ OTH REF: 000

HW

Card 2/2

L 7693-66 EWT(l)/EWT(m)/T/EWP(t)/EWP(b)/EWA(c) IJP(c) JD/JG/GG

ACC NR: AP5028724 SOURCE CODE: UR/0363/65/001/011/1945/1948

AUTHOR: Shevchenko, A. V.; Lopato, L. M.; Tresvyatskiy, S. G. 55 B

ORG: Institute of Problems of the Study of Materials, Academy of Sciences, UkrSSR (Institut problem materialovedeniya Akademii nauk UkrSSR)

TITLE: Synthesis and some physicochemical properties of single crystals of rare earth chromites

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 11, 1965, 1945-1948

TOPIC TAGS: single crystal, rare earth element, chromium compound, single crystal growth, crystal property, crystal structure, crystallization, fluxed melt, rare earth element chromite

ABSTRACT: Growing single crystals of rare-earth element chromites from fluxed melts has been studied because of the earlier reported unsuccessful attempts to obtain the single crystals by this technique. The authors also intended to study certain physicochemical properties of these single crystals and to solve the problem of the existence of garnet-type structure in the R_2O_3-Cr_2O_3 systems. Experiments are described, in which PbO and PbF_2, PbO and B_2O_3 mixtures, and Bi_2O_3 were used as solvents (fluxes) for the powdered chromite which was synthesized from pure rare earths and chromium nitrate. The R_2O_3/Cr_2O_3 ratio in the starting mixture, the oxides/solvent

Card 1/2 UDC: 546.65'763:548.55

L 7693-66

ACC NR: AP5028724

ratio, and temperature of dissolution were the main variables of the growth process. Exclusive formation of single crystals of the thirteen rare-earth element chromites of the perovskite-type structure was established only in the PbO + PbF_2 fluxed melt under optimized conditions. The perovskite structure was obtained regardless of whether the R_2O_3/Cr_2O_3 ratio corresponded to the stoichiometric composition of perovskite or garnet. At a maximum temperature of dissolution above the optimum (1360C) in the PbO + PbF_2 fluxed melt, in PbO + B_2O_3 and in Bi_2O_3 fluxed melts, formation of chromium oxide single crystals was observed in addition to that of perovskite. The single crystals of the rare-earth element chromites had 2 x 2 x 2 mm maximum dimensions. IR spectra, x-ray and petrographic analysis of the crystals indicated that the rare-earth element chromites begin to dissociate at over 2100C in argon and that thermal dissociation increases with decreasing ionic radius of the rare earth element. Orig. art. has: 2 tables and 2 figures. [JK]

SUB CODE: SS/ SUBM DATE: 21Jun65/ ORIG REF: 004/ OTH REF: 006/ ATD PRESS: 4142

Card 2/2

L 23805-66 EWT(m)/T/EWP(t) IJP(c) JD/JG

ACC NR: AP6007250 (A) UR/0363/66/002/002/0269/0274

37

B

AUTHOR: Tresvyatskiy, S.G.; Pavlikov, V.N.; Lopato, L.M.

ORG: Institute for Problems of Materials, AN UkrSSR (Institut problem materialovedeniya AN UkrSSR)

TITLE: Phase diagram of the system Sc_2O_3-Cr_2O_3

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v.2, no.2, 1966, 269-274

TOPIC TAGS: scandium compound, chromium compound, alloy phase diagram, metal heat treatment, x ray analysis

ABSTRACT: Phase transformations in the scandium trioxide-chromium trioxide system were studied in samples subjected to heat treatment in a high temperature furnace in an argon atmosphere. A phtographic investigation was made by the conventional method with penetrating and reflected light; in the latter case with the use of etching in a melt of $KHSO_4$ at 200°C for 2 to 3 min. An X-ray investigation was made on URS-55a and URS-70 apparatus. Infrared spectra of the alloys were obtained on UR-10 spectroscope over an interval from 400-700 cm^{-1}. The change in the oxide content during heat treatment was controlled by conventional chemical analysis. The article gives a phase diagram based on the experimental results, a table showing the X-ray results, and microphotos of the sam-

Card 1/2 UDC: 541.123.2

L 23805-66

ACC NR: AP6007250

ples. There was observed the existence of a compound which melts at 2130± 30°C. The probable composition of this compound is: Cr_2O_3/Sc_2O_3 = 1:3 or 1:4. The initial oxides form solid solutions based on chromium oxide with a specific solubility of chromium oxide in scandium oxide is 10 mole %. With a decrease in temperature, the specific solubility decreases to 17 mole % scandium oxide and 5 mole % chromium oxide. Orig. art. has: 6 figures and 2 tables.

SUB CODE: 11/ SUBM DATE: 05Jul65/ ORIG REF: 005/ OTH REF: 008

Card 2/2 FV

L 32957-66 EWI(m)/EWI(c)/EWA(t)/ETI IJP(c) AT/AWP/JD/JG

ACC NR: AP6015740 (A) SOURCE CODE: UR/0073/66/032/005/0437/0439

AUTHOR: Lepato, L. M.; Yaremenko, Z. A.; Treskyatskiy, S. G.

ORG: Institute of Problems in the Science of Materials AN UkrSSR (Institut problem materialovedeniya AN UkrSSR)

TITLE: Interaction between the oxides of rare-earth elements and barium oxide

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 32, no. 5, 1966, 437-439

TOPIC TAGS: oxide, barium oxide, rare earth, x ray diffraction study, refractive index, strontium compound

ABSTRACT: New compounds are synthesized from BaO and the following rare-earth oxides in the yttrium subgroup: Y_2O_3, Ho_2O_3, Er_2O_3, Tu_2O_3, Yb_2O_3 and Lu_2O_3. Some of the physical and chemical properties of the resultant compounds are studied. Microstructural analysis and x-ray powder diagrams are used for phase identification. The new compounds have the following structural formulas: BaY_2O_4, $BaHo_2O_4$, $BaEr_2O_4$, $BaTu_2O_4$, $BaYb_2O_4$ and $BaLu_2O_4$. The melting points, indices of refraction and birefringence of the compounds are tabulated. The optical properties of the barium compounds differ somewhat from those for compounds with strontium oxide which were studied previously. The indices of refraction for the new compounds lie within the limits of the refractive indices for the initial oxides, whereas the strontium compounds show higher in-

UDC: 546.65'42

Card 1/2

L 32957-65

ACC NR: AP6015740

dices of refraction than the initial oxides. Compounds with barium oxide also have low birefringence (0.005-0.01), while the analagous strontium compounds have a birefringence of 0.035. The melting points of the new compounds lie within a range of 1980-2500°, which is somewhat lower than those observed for the strontium compounds. Orig. art. has: 1 figure, 3 tables.

SUB CODE: 07/ SUBM DATE: 12Dec64/ ORIG REF: 002/ OTH REF: 005

Card 2/2

L 32047-66 EWT(m)/T/EWP(t)/ETI IJP(c) JD/JG
ACC NR: AP6013347 SOURCE CODE: UR/0363/66/002/004/0679/0682

AUTHOR: Pavlikov, V.N.; Lopato, L.M.; Tresvyatskiy, S.G.

ORG: Institute of Materials Science Problems, Academy of Sciences UkrSSR (Institut problem materialovedeniya Akademii nauk UkrSSR)

TITLE: Phase transformations of certain rare earth chromites

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 4, 1966, 679-682

TOPIC TAGS: chromium compound, phase transition, praseodymium compound, neodymium compound, samarium compound, yttrium compound

ABSTRACT: Phase transformations were studied by differential thermal analysis, dilatometric measurements, high-temperature microscopy, and high-temperature x-ray analysis in binary systems formed by chromium oxide with rare earth oxides TR_2O_3, where TR_2O_3 = La_2O_3, Pr_2O_3, Nd_2O_3, Sm_2O_3, and Y_2O_3. $LaCrO_3$ was found to have a reversible endothermic transformation at 290 ± 5C, associated with a change from a rhombic to an orthorhombic structure. This is confirmed by the conservation of anisotropy in the single crystal of the high-temperature form of $LaCrO_3$. The effects associated with the transformation of $LaCrO_3$ are slight. No polymorphic transformations were noted at 20—900C in

UDC 546.65'763

Card 1/2

praseodymium, neodymium, samarium, and yttrium chromites. However, the possibility of polymorphic transformations at higher temperatures is not excluded. Orig. art. has: 3 figures and 1 table.

SUB CODE: 11, 07 / SUBM DATE: 21Jun65 / ORIG REF: 005 / OTH REF: 006

L 36402-66 EWT(m)/T/EWP(t)/ETI IJP(c) JD

ACC NR: AP6018776 (A) SOURCE CODE: UR/0070/66/011/003/0459/0463

AUTHOR: Tresvyatskiy, S. G.; Yaremenko, Z. A.; Lopato, L. M.

ORG: Institute for Problems in Materials (Institut problem materialovedeniya)

TITLE: Crystal optical properties of synthetic periclase single crystals

SOURCE: Kristallografiya, v. 11, no. 3, 1966, 459-463

TOPIC TAGS: crystal optic property, single crystal, x ray diffraction analysis, absorption spectrum

ABSTRACT: Large single crystals of periclase were grown by directional solidification and their crystal optical properties were studied. The directional cooling resulted in columnar crystals having the crystallographic growth axes g_4, g_3 and g_2. Cubic shaped crystals adopted g_4 as the growth axis while g_3 and g_2 were typical of elongated crystals. The crystal dimensions along the growth axis were 50 mm and 20-30 mm along the cross section. Generally, the synthetic periclase crystals were transparent; only in some cases did they appear cloudy as a result of micropores (0.01 mm) or microcracks. Photographs and micrographs of the crystals are shown. Negative crystals (gaseous inclusions having crystalline forms) were observed and micrographs taken in the center of these showed a continuous mosaic structure. The crystals had a glassy shine and a Mohs hardness of 6. Chemical analysis revealed an impurity concentration of 0.01 to 0.5%;

UDC: 548.0 : 535/32

Card 1/2

L 36402-66

ACC NR: AP6018776

Al, Fe, Si and Cr were the residual impurities. Vacuum annealing to 2200°C further reduced the impurities. Refraction and birefraction were observed to occur in the crystals. X-ray measurements gave 4.212±0.002 Å as the lattice parameter of the primitive cubic cell. Chemical and thermal etching was done in order to bring out the mosaic structure (0.1 to 0.01 mm) and the screw dislocations emerging at the surface. Further x-ray analysis showed the mosaic block dimensions to range from 0.01 to 1 mm, the angle of misorientation to be 5° and the dislocation density to be about 10^5-10^6 cm^{-2}. The absorption spectrum of the magnesium oxide crystals was measured for wavelengths ranging from 2 to 25 μ. From 2 to 6 μ the absorption was absent, from 6 to 10 μ it dropped sharply and from 10 to 25 μ it was very strong. Orig. art. has: 6 figures.

SUB CODE: 20,11/ SUBM DATE: 29Apr65/ ORIG REF: 002/ OTH REF: 002

Card 2/2 mcp

L 46242-66 EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP6023917 SOURCE CODE: UR/0363/66/002/007/1240/1243

AUTHOR: Shevchenko, A. V.; Lopato, L. M.; Tresvyatskiy, S. G. 24 B

ORG: Institute of Materials Science Problems, AN UkrSSR (Institut problem materialovedeniya AN UkrSSR)

TITLE: Phase diagram of the Gd_2O_3-Cr_2O_3 system

SOURCE: AN SSSR. Izv. Neorg materialy, v. 2, no. 7, 1966, 1240-1243

TOPIC TAGS: gadolinium compound, phase diagram, chromium compound, chromium oxide

ABSTRACT: X-ray, microstructural, and chemical analyses as well as infrared spectroscopy were used to study the phase relationships in the Gd_2O_3-Cr_2O_3 system in the 1600-2400°C range. The phase diagram obtained is shown in Fig. 1. It is shown that the system contains only one congruently melting chemical compound, $GdCrO_3$, which has a melting point of 2350±30°C. The compound forms eutectics; the eutectic with Gd_2O_3 is composed of 77 mole % Gd_2O_3 and 23 mole % Cr_2O_3 and melts at 2060±20°C; the eutectic with Cr_2O_3 is composed of 15 mole % Gd_2O_3 and 85 mole % Cr_2O_3 and melts at 2120±30°C. Some physicochemical properties of gadolinium chromite (density, coefficient of linear thermal expansion, crystal optical properties) were determined. Orig. art. has: 3 figures.

Card 1/2 UDC: 546.662+546.763

L 46242-66

ACC NR: AP6023917

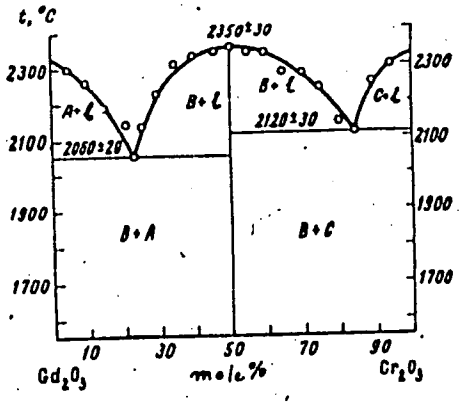

Fig. 1. Phase diagram of the Gd_2O_3-Cr_2O_3 system. Gd_2O_3 - A; $GdCrO_3$ - B; Cr_2O_3 - C

SUB CODE: 07/ SUBM DATE: 21Jun65/ ORIG REF: 004/ OTH REF: 002

Card 2/2 hs

L 46241-66 EWT(m)/EWP(t)/ETI IJP(c) JD
ACC NR: AP6023918 SOURCE CODE: UR/0363/66/002/007/1244/1247

AUTHOR: Pavlikov, V. N.; Lopato, L. M.; Tresvyatskiy, S. G.

ORG: Institute of Materials Science Problems, Academy of Sciences, UkrSSR (Institut problem materialovedeniya Akademii nauk UkrSSR)

TITLE: Study of the phase diagram of the Y_2O_3-Cr_2O_3 system

24
B

SOURCE: AN SSSR. Izv. Neorg materialy, v. 2, no. 7, 1966, 1244-1247

TOPIC TAGS: phase diagram, yttrium compound, chromium oxide

ABSTRACT: The phase diagram of the Y_2O_3-Cr_2O_3 system was studied in the 1800-2500°C range, apparently for the first time. The diagram (see Fig. 1) was plotted on the basis of petrographic and x-ray structural studies of samples subjected to heat treatment in argon. It was found that the system contains only one compound of composition 1:1, melting congruently at 2310±30°C. The compound undergoes a partial thermal dissociation in the solid phase, which causes the maximum on the fusibility curve to be diffuse. The compound forms two eutectics: one with Y_2O_3, composed of 72 mole % Y_2O_3 and 28 mole % Cr_2O_3 and melting at 2020±30°C, and one with Cr_2O_3, composed of 80 mole % Cr_2O_3 and 20 mole % Y_2O_3, melting at 2070±30°C. No solid solutions were observed in the system. Orig. art. has: 3 figures and 1 table.

Card 1/2 UDC: 546.641-31+546.763-31

L 46241-66

ACC NR: AP6023918

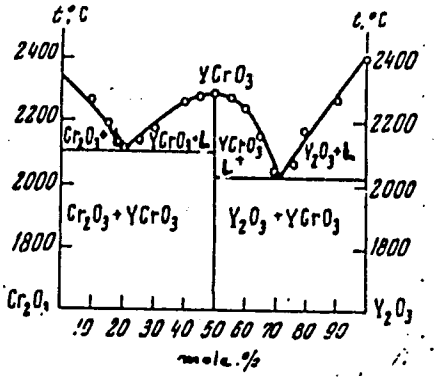

Fig. 1. Phase diagram of the Y_2O_3-Cr_2O_3 system

SUB CODE: 07/ SUBM DATE: 11Oct65/ ORIG REF: 001/ OTH REF: 005

hs

Card 2/2

L 06495-67 EWT(m)/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AP6028301 SOURCE CODE: UR/0363/66/002/006/1055/1057

AUTHOR: Pavlikov, V. N.; Lopato, L. M.; Yaremenko, Z. A.; Shevchenko, A. V. 27 13

ORG: Institute of Materials Science Problems, Academy of Sciences, UkrSSR (Institut problem materialovedeniya Akademii nauk UkrSSR)

TITLE: Phase diagram of the Sm_2O_3-Cr_2O_3 system 27 27 27

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 6, 1966, 1055-1057

TOPIC TAGS: samarium compound, chromium compound, phase diagram

ABSTRACT: The Sm_2O_3-Cr_2O_3 phase diagram was studied in the range from 1600°C to the liquidus temperatures. Petrographic, x-ray diffraction and chemical data on samples subjected to thermal treatment in argon at 1600-2400°C were used to plot the phase diagram (see Fig. 1). Only one compound, $SmCrO_3$, is formed in the system. It melts congruently at 2300±30°C. It forms eutectics with Sm_2O_3 of the composition 80 mole % Sm_2O_3 and 20 mole % Cr_2O_3 (melting point of 1980±30°C), and with Cr_2O_3 of the composition 16 mole % Sm_2O_3 and 84 mole % Cr_2O_3 (melting point 2080±30°C). No solid solutions could be detected in the system. Orig. art. has: 2 figures and 1 table.

Card 1/2 UDC: 546.659.3-31+546.763-31

ACC NR: AP6028301

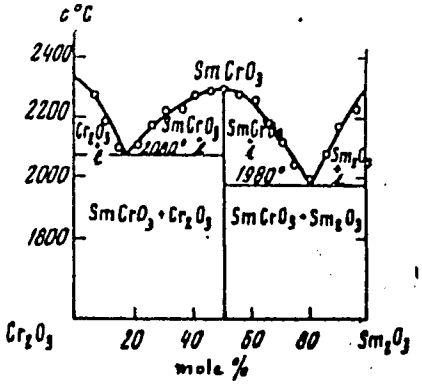

Fig. 1. Phase diagram of the Sm_2O_3-Cr_2O_3 system

SUB CODE: 11,07 SUBM DATE: 06Nov65/ ORIG REF: 001/ OTH REF: 004

Card 2/2 mLE

S/058/62/000/010/018/093
A061/A101

AUTHOR: Lopato, V. G.

TITLE: Study of an annular multiterminal network as a feedback bridge of a linear electron accelerator

PERIODICAL: Referativnyy zhurnal, Fizika, no. 10, 1962, 6, abstract 10B53 (In collection: "Uskoriteli", no. 3, Moscow, Gosatomizdat, 1962, 192 - 197)

TEXT: The results of an experimental study of a waveguide annular multiterminal network used in the h-f power recuperation circuit of a linear accelerator are presented. They agree with the theoretical calculation made by Saxon (J. Saxon, Proc. Phys. Soc., 1954, v. 67 (B), 417) and with data from analogous experiments carried out by Dushinyy and Khizhnyak (Ukr. fiz. zh., 1957, v. 2, 106).

V. Kanunnikov

[Abstracter's note: Complete translation]

Card 1/1

42973

S/058/62/000/011/041/061
A160/A101

24.6730

AUTHOR: Lopato, V. G.

TITLE: An investigation of a ring-type multiterminal network as a feedback bridge of a linear electron accelerator

PERIODICAL: Referativnyy zhurnal, Fizika, no. 11, 1962, 38, abstract 11-3-75ye (In collection: "Uskoriteli", no. 3, Moscow, Gosatomizdat, 1962, 192 - 197)

TEXT: Presented are the results of an experimental investigation carried out of the properties of a ring-type network having a transmission factor of n = = 1 and serving as a feedback bridge of a linear accelerator. An analysis was carried out of the requirements for the ring-type network as a unit of the feedback. The results presented reveal that the experimental and theoretical data agree well. The ring-type network with n = 1 may be used as a feedback bridge with a rather considerable change in the power attenuation in the accelerator (from 5 db and lower). On the basis of the investigations conducted, it was concluded that the ring-type network with n = 1 meets the requirements for feedback

Card 1/2

An investigation of a...

bridges, and that it represents an extremely wide-band system which will not complicate the operation of the linear accelerator. The results obtained at a high and low power level correspond to one another. This proves the accuracy of the experiments carried out. Considered is the diagram of the ring-type network, the scheme and the results of an investigation of reflections, the results of an investigation carried out of the relation between the power and the attenuation, the graph of the power distribution, and the diagram of the accelerator. There are 2 references.

V. L.

[Abstracter's note: Complete translation]

LOPATO, V. G.

95

S/089/62/013/006/019/027
B102/B186

AUTHORS: G. T. and M. R.

TITLE: Nauchnaya konferentsiya Moskovskogo inshenerno-fizicheskogo instituta (Scientific Conference of the Moscow Engineering Physics Institute) 1962

PERIODICAL: Atomnaya energiya, v. 13, no. 6, 1962, 603 - 606

TEXT: The annual conference took place in May 1962 with more than 400 delegates participating. A review is given of these lectures that are assumed to be of interest for the readers of Atomnaya energiya. They are following: A. I. Leypunskiy, future of fast reactors; A. A. Vasil'yev, design of accelerators for superhigh energies; I. Ya. Pomeranchuk, analyticity, unitarity, and asymptotic behavior of strong interactions at high energies; A. B. Migdal, phenomenological theory for the many-body problem; Yu. D. Fivejskiy, deceleration of medium-energy antiprotons in matter; Yu. M. Kogan, Ya. A. Iosilevskiy, theory of the Mössbauer effect; M. I. Ryazanov, theory of ionization losses in nonhomogeneous medium; Yu. B. Ivanov, A. A. Rukhadze, h-f conductivity of suboritical plasma;

Card 1/4

S/089/62/013/006/019/027
B102/B186

design of 30-Mev electron linear accelerator; Ye. G. Pyatnov, A. A. Glazkov, V. G. Lopato, A. I. Finogenov, G. N. Skepskiy, V. D. Seleznev, experimental characteristics of low-energy electron linear accelerators; G. A. Zeytlenk, V. M. Levin, S. I. Piskunov, V. L. Smirnov, V. K. Khokhlov, radiocircuit parameters of ЛУЭ (LUE)-type accelerators; G. A. Tyagunov, O. A. Val'dner, B. M. Gokhberg, S. I. Korshunov, V. I. Kotov, Ye. M. Moroz, accelerator classification and terminology; O. S. Milovanov, V. B. Varaksin, P. R. Zenkevich, theoretical analysis of magnetron operation; A. G. Tragov, P. R. Zenkevich, calculation of attenuation in a diaphragmated waveguide; Yu. P. Lazarenko, A. V. Ryabtsev, optimum attenuation length for linear accelerator; A. A. Zhigarev, R. Ye. Yeliseyev, review on trajectographs; I. G. Morozova, G. A. Tyagunov, review on more than 500 ion sources; M. A. Abroyan, V. L. Komarov, duoplasmatron-type source; V. S. Kuznetsov, A. I. Solnyshkov, calculation and production of intense ion beams; V. M. Rybin (Ye. V. Armenskiy), inductive current transmitters of high sensitivity; V. I. Koroza, G. A. Tyagunov, kinetic description of linear acceleration of relativistic electrons; A. D. Vlasov, phase oscillations in linear accelerators; E. L. Burshteyn, G. V. Voskresenskiy, beam field effects in the waveguide of an electron linear accelerator; R. S. Bobovikov,

S/759/62/000/003/019/021

AUTHOR: Lopato, V. G.

TITLE: Investigation of a ring multipole as a feedback bridge for a linear electron accelerator

SOURCE: Moscow. Inzhenerno-fizicheskiy institut. Uskoriteli. no.3.1962. 192-197

TEXT: The properties were investigated of a ring multipole having a transfer function n = 1 used as a feedback bridge in a linear accelerator and intended to feed back the wasted power, normally absorbed by the terminal load, to the input and employ it for additional acceleration. The demands imposed on the ring were optimum matching of the bridge arms and maximum decoupling between the high-frequency generator and the accelerator output. The investigations comprised tests on reflections from the side arms over a wide frequency range, tests of the distribution of power between the side arms as a function of the frequency, and the operation of the ring in a dummy circuit simulating an accelerator with feedback. Both high (1 Mw) and low (0.1 w) power levels were tested. The test circuitry is described. The bridge is found to have a large bandwidth (on the order of 150 Mc with VSWR less than 1.1) and thus will not cause any dis-

Card 1/2

tortion in the tuning range of an iris waveguide, which usually is 6 - 12 Mc. The experimental data agreed with calculations within 7%. The bridge can be used with a considerable variation of the power attenuation in the accelerator (from 5 db downward), and the distribution of power between the arms remains invariant over the entire investigated frequency band. The experimental data were also found to agree with Saxon's theoretical calculations (Proc. Phys. Soc. v. 67(B), 417, 1954), thus confirming the correctness of the experimental technique. There are 6 figures.

SAMARETS, V.D., insh.; LOPATO, V.V., monter.

Increasing the dielectric strength of all-purpose measuring gauges. Energetik 5 no.12:21 D '57. (MIRA 10:12)
(Gauges)

LOPATOVA, V.A., gornyy inzh.

"Coal mining in the German Federal Republic" by A.P. Sudoplatov.
Reviewed by V.A. Lopatova. Ugol' 33 no. 7:48 Jl '58. (MIRA 11:7)
(Germany, West--Coal mines and mining)

LOPATO..SKI, L.

"Cutters for the manufacturing of precise scales." p. 33
(Mechanik, Vol 25 No 1 Jan 53 Warszawa)

SO: Monthly List of East European Accessions, Vol 2 No 9 Library of Congress Sept 53 Uncl

MINDLIN, Ya.B., glavnyy inzh.; SVEKOL'NIKOVA, Z.P., inzh.; KAMINSKIY, M.Ye. Prinimali uchastiye: LOPATSINSKIY, V.Ye.; PERESETSKIY, M.L.; EL'KAND, V.D., tekhn.red.

[Strength standards for grinding wheels and norms for consumption of diamond tools] Normy stoikosti shlifoval'nykh krugov i raskhoda almaznogo instrumenta. Izd.3. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit.lit-ry, 1959. 79 p. (MIRA 12:8)

1. Russia (1923- U.S.S.R.) Ministerstvo mashinostroyeniya. Nauchno-issledovatel'skoye byuro tekhnicheskikh normativov. 2. Sotrudniki Gosudarstvennogo nauchno-issledovatel'skogo instituta almaznogo instrumenta i protsessov almaznoy obrabotki (for Mindlin, Svekol'nikova, Kaminskiy).
(Grinding wheels)

LOPATTO, A. Ye.

Technology

Honorary Academician Vladimir Grigor'evich Shukhov, prominent Russian engineer, Moskva, Izd-vo Akademii nauk SSSR, 1951.

Monthly List of Russian Accessions, Library of Congress, March 1952. UNCLASSIFIED.

1. [illegible], A.Ye., Eng.

2. USSR (600)

4. Concrete Construction

7. Pneumatic lining of couble-curved slabs. Stroi. prom. 30, no. 6, 1952 Odesskiy gidrotekhnicheskiy institut

9. Monthly List of Russian Accessions, Library of Congress, August 1952 UNCLASSIFIED.

LOPATTO, Aleksandr Eduardovich; REZNICHENKO, I.Ye., red.; YEREMINA, I.A., tekhn. red.; LEUSHCHENKO, N.L., tekhn. red.

[Calculating the sections and designing the elements of reinforced-concrete structures] Raschet sechenii i konstruirovanie elementov zhelezobetonnykh konstruktsii. Kiev, Gosstroiizdat USSR, 1963. 334 p. (MIRA 16:8)
(Reinforced concrete construction)

LOPATTO, A.E., kand.tekhn.nauk, dotsent; SHIL'GORIN, F.A., inzh.

Reinforced concrete plungers for hydraulic presses with an up to 1,000-ton capacity. Vest.mashinostr. 43 no.8:23-25 Ag '63. (MIRA 16:9)
(Hydraulic presses) (Reinforced concrete construction)

LOPATTO, V.S., inzh.

Determining the degree of the mechanization of loading and unloading operations. Mekh. i avtom. proizv. 17 no.6:53-57 Je '63. (MIRA 16:7)

(Loading and unloading)

ZVYAGINTSEV, O.Ye; LOPATTO, Yu.S.

Tetravalent oxyhydroxy compounds of trivalent iron.
Zhur.neorg.khim. 6 no.4:863-869 Ap '61. (MIRA 14:4)

1. Institut obshchey i neorganicheskoy khimii imeni N.S.Kurnakova AN SSSR.

(Iron compounds)

LOPATTO, Yuriy Semenovich; SHUSTOVA, I.B., red.; ATROSHCHENKO, L.Ye., tekhn. red.

[Iron] Zhelezo. Moskva, Izd-vo "Znanie," 1962. 46 p. (Narodnyi universitet kul'tury: Estestvenno-nauchnyy fakul'tet, no.3) (MIRA 15:6)

(Iron)

ZVYAGINTSEV, O.Ye.; LOPATTO, Yu.S.

Tetracyclic oxycarbonate complex compounds of trivalent iron.
Zhur.neorg.khim. 7 no.6:1272-1276 Je '62. (MIRA 15:6)
(Iron compounds) (Alkali metal carbonates)

LOPATIN, Yuriy Semenovich, kand. khim. nauk; PETRYANOV, I.V., red.; SHUSTOVA, I.B., red.; RAKITIN, I.T., tekhn. red.

[The periodic law in the light of recent discoveries] Periodicheskii zakon v svete noveishikh otkrytii. Moskva, Izd-vo "Znanie," 1963. 46 p. (Narodnyi universitet kul'tury: Estestvennonauchnyi fakul'tet no.12) (MIRA 17:2)

1. Chlen-korrespondent AN SSSR (for Petryanov).

LOPATUKHIN, I.M.; KOZHIN, V.I.

Using the GS-1 hydraulic copying sliding carriage. Stan. i instr. 32 no. 1:37 Ja '61. (MIRA 14:2)
(Lathes)

LOPATUKHIN, I.M.; NOZHIN, V.I.; MUKHTAROV, M.I.

Improving technological processes of the machining of water-cooled mandrels. Za tekh.progr. 3 no.3:25-26 Mr '63. (MIRA 16:10)

1. Azerbaydzhanskiy truboprokatnyy zavod im. V.I.Lenina.

ACC NR: AR7004097 (N) SOURCE CODE: UR/0169/66/000/012/V014/V014

AUTHOR: Davidan, I. N.; Rozhkov, V. A.; Andreyev, B. M.; Lopatukhin, L. I.

TITLE: Results of investigations of oceanic wave conditions

SOURCE: Ref. zh. Geofizika, Abs. 12V87

REF SOURCE: Sb. 2-y Mezhdunar. okeanogr. kongress, 1966. Tezisy dokl. M., Nauka, 1966, 133-134

TOPIC TAGS: oceanography, ocean dynamics, ~~wave spectral structure~~ hydrographic survey, correlation function, stochastic process

ABSTRACT: Processed data from wave observations at the State Institute of Oceanography (more than 200 wave recordings, each comprising several "wavegrams", and close to 50 stereophotogrammetric sheets) are presented. The processing of observations from two ships with a base ranging from 1 cable length to 1 nm has yielded statistical characteristics which are adequate for practical purposes. In the case of steady swell at a sampling volume $>$ 300 waves, the maximum divergence of one-dimensional distributions (of "visible" waves) does not exceed 5%. In two-dimensional distributions, similar divergencies occur at a

Card 1/3

UDC: 551.466.326

ACC NR: AR7004097

sampling volume > 600 waves. An investigation of the sampling variability of correlation and spectral functions in 20-min realizations showed that the divergences between empirical corellograms are relatively small only within a 20-sec correlation interval increase linearly and with major shifts. Sampling variability of the spectral density function of the swell coordinates obtained by the T'yuki methodology is described by the X^2 distribution. The basic parameters of empirical spectral analysis (optimal length of process realization, truncation point of the correlogram) are evaluated and recommendations on the selection of smoothing functions are made. A new criterion for determining the truncation point of statistical correlogram evaluation is introduced under the assumption that up to the first envelope minimum, the shape of the correlation function is determined by the stochastic nature of the swell, and following this minimum, by the presence of harmonic components. A relationship is established between the optimal length of the realization which leads to stable evaluations of the spectral density function and the natural truncation point of the correlogram, which is defined as the envelope's first minimum. If the length of the realization does not make it possible to determine reliably the natural truncation point, it is necessary to apply weight functions with a high rate of decrease. As a result, stable evaluations of spectral density functions are calculated. Typical features of the spectral structure of the swell

Card 2/3

ACC NR: AR7004097

are specified and some relationships for calculating spectral functions of wave coordinates are established. Computational relationships reflect accurately the typical features of the waves spectrum. From the authors' summary. [Translation of abstract] [DW]

SUB CODE: 08/

Card 3/3

KOMISSAROV, A.I., kand. tekhn. nauk, dotsent; LOPUKHINA, I.V., assistent

Characteristics of the movement of the needle thread in high-speed shuttle machines. Nauch. trudy MTILP no.30:214-218 '64. (MIRA 18:6)

1. Kafedra mashin i apparatov Moskovskogo tekhnologicheskogo instituta legkoy promyshlennosti.

LOPATUKHIN, R.I., inzh.; LESHCHINSKIY, A.I., inzh.

Measurement of electrical characteristics of NRVU2-450/1 relays.
Avtom., telem. i sviaz' 8 no.6:40-41 Je '64. (MIRA 17:6)

LOPATUKHIN, V.G., inzh.

Preventing accumulation of sludge in boilers and sediment formation in the ash collection and removal systems. Energetik 12 no. 1:10-11 Ja '64. (MIRA 17:3)

LOPATUKHINA, A., inzh.; TSEYTLIN, I., inzh.; LISNYAK, T., inzh. (Moskva)

New method of lacquering. Prom. koop. 13 no.4:13 Ap '59.
(MIRA 12:6)

(Metals--Finishing)

(2)

Chemical Abst.
Vol. 48 No. 6
Mar. 25, 1954
Electrochemistry

Preparation of mixed [redacted] catalyst. B. [redacted] and A. I. Shlygin. Izvest. Akad. [redacted] No. 101, 52 [redacted]. No. 4, 60-4(1951)

The Pd-Pt catalyst was prepd. electrochemically from $PdCl_2$-$PtCl_4$ soln. (100 1), and after cathodic treatment in H_2SO_4 the electrode was used in the usual H-electrode cell. The electrochem. behavior of adsorbed H on such electrode differs but slightly from that on pure Pd. However, the mixed catalyst had a much more developed surface, as shown by greater H and O adsorption. The mixed catalyst had high catalytic activity as checked in hydrogenation of methylethylethynylcarbinol as well as in decompn. of H_2O_2. It was 50 times more active than Pt in hydrogenation and 100 times more active than Pd in the decompn. of H_2O_2. The catalyst was not a mixt. of crystals of Pt and Pd but probably was a solid soln. of the metals. C. M. K.

LOPATUKHINA, B.M.; SHLYGIN, A.I.

Role of adsorbed hydrogen in the hydrogenation process. Izv.AN Kazakh.SSR.Ser.khim. no.4:65-70 '51. (MLRA 9:5)
(Hydrogenation)

SEMENOVA, Ye.L.,; PONAMAREVA, N.A.,; TOLSTUKHINA, Ye.N.,; KARTASHOVA, A.L.,; ABRAMOVA, O.F.,; LOPATUKHINA, L.G.,; DURASOVA, M.N.

Therapeutic effects of certain protein fractions of plague serum. Zhur. mikrobiol. epid. i immun. 27 no.2:78-83 F'56. (MLRA 9:5)

1. Iz Moskovskogo instituta vaktsin i syvorotok imeni Mechnikova, Sredne-Aziatskogo nauchno-issledovatel'skogo instituta i Gosudarstvennogo kontrol'nogo instituta imeni Tarasevicha.

(PLAGUE, immunol.
ther. eff. of protein fractions of antiplague serum)
(IMMUNE SERUMS
antiplague serum protein fractions, ther. eff.)

SEMENOVA, Ye.L.; KARTASHEVA, A.L.; ABRAMOVA, G.F.; LOPATUKHINA, L.G.

Comparative therapeutic effectiveness of bacteriomycin, biomycin, streptomycin, and gamma globulin in plague; experimental studies. Zhur.mikrobiol.epid. i immun. 28 no.3:119-122 Mr '57. (MLRA 10:6)

1. Iz Srednezaiatskogo nauchno-issledovatel'skogo protivochumnogo instituta Ministerstva zdravookhraneniya Soyuza SSR.

(PASTEURELLA PESTIS, effect of drugs on,
antibiotics & gamma globulin (Rus))
(ANTIBIOTICS, effects,
on Pasteurella pestis (Rus))
(GAMMA GLOBULIN, effects,
same)

KISELEVA, V.M., kand.med.nauk; USMANOVA, F.I., kand.veterin.nauk; LOPATUKHINA, L.G.

Isolation of brucellosis cultures from the tissues and fluids of guinea pigs' eyes following extraocular inoculation. Oft. zhur. 14 no.5:316-320 '59. (MIRA 12:10)

1. Iz kafedry glaznykh bolezney (zav. - zasl.deyatel' nauki, prof.V.P.Roshchin) Kazakhskogo meditsinskogo instituta, laboratorii po izucheniyu brutsellеza Nauchno-issledovatel'skogo veterinarnogo instituta Akademii sel'sko-khoz.nauk Kazakhskoy SSR i Sredno-Aziatskogo protivochumnogo instituta.
(BRUCELLA) (EYE)

17 (2, 6) SOV/16-60-4-13/47

AUTHOR: Shmuter, M.F., Lopatukhina, L.G., Sosunova, A.N. and Yastrebova, Ye.N.

TITLE: The Effects of Brucellosis Vaccination on the Course of the Infectious Process in Guinea Pigs Infected With Brucella Melitensis

PERIODICAL: Zhurnal mikrobiologii, epidemiologii i immunobiologii, 1960, Nr 4, pp 58 - 60 (USSR)

ABSTRACT: Experiments were performed to determine the effects of brucellosis vaccination on persons infected with brucellosis by extrapolating the results of vaccination of guinea pigs, experimentally infected with Br. melitensis. Vaccination of the infected animals 2 - 3 months after infection with Br. melitensis did not provoke chronic infection. No increase in the multiplication or spread of brucella could be noted in the animal's organs. The vaccinal strain probably reacted by stimulating the body's defensive mechanism, clearing the body more rapidly of Br. melitensis. It thus reacted similarly to vaccine therapy with killed brucella. It was difficult to achieve superinfection in animals infected with Br. melitensis by the administration of a vaccinal culture of low virulence; the vaccinal strain either refused to take or

Card 1/2

SOV/16-60-4-13/47

The Effects of Brucellosis Vaccination on the Course of the Infectious Process in Guinea Pigs Infected With Brucella Melitensis

else was preserved in the body for only a very brief period of time. There are 2 tables.

ASSOCIATION: Sredneaziatskiy protivochumnyy institut (Central Asian Anti-Plague Institute)

SUBMITTED: July 11, 1959

Card 2/2

S/016/60/000/06/03/051

AUTHORS: Shmuter, M.F., Lopatukhina, L.G., Sosunova, A.N. and Yastrebova, Ye.N.

TITLE: The Comparative Characteristics of Three Vaccinal Strains of Brucella (19-BA, 19 and M) in Experimental Subcutaneous and Skin Administration

PERIODICAL: Zhurnal mikrobiologii, epidemiologii i immunobiologii, 1960, No. 6, pp. 12 - 16

TEXT: At the proposal of the Ministerstvo zdravookhraneniya SSSR (Ministry of Health of the USSR), the authors studied the characteristics of the three vaccinal strains of Brucellus abortus (19-BA, 19 and M) used in the USSR for immunizing people against brucellosis. Gunea pigs were immunized subcutaneously or dermally with the strains, killed off after 1, 5, 15, 30, 45, 60, 90 or 180 days and studied for pathological lesions, the isolation of brucellae from various organs and for their immune response. Strair M had greater residual virulence than strains 19-BA and 19, caused more extensive pathological lesions and led to a greater spread of brucella through the organs and tissues. No essential difference was noted in the residual virulence of strains 19-BA and 19, since both caused identical lesions in the internal organs, affected the same tissues and caused the same immune

Card 1/2

S/016/60/000/06/03/051

The Comparative Characteristics of Three Vaccinal Strains of Brucella (19-BA, 19 and M) in Experimental Subcutaneous and Skin Administration

response. The immune response from the M strain lasted longer and was more intense than that caused by strains 19-BA and 19. All three strains were highly immunogenic. Dermal vaccination caused slightly less lesions and the same depth of immunity as subcutaneous immunization. Strain 19 is therefore to be recommended for vaccination purposes. If strain M is used, care must be taken in selecting the correct dosage in view of its greater residual virulence. There are 2 tables and 6 Soviet references.

ASSOCIATION: Sredneaziatskiy protivochumnyy institut (Central Asian Anti-plague Institute)

SUBMITTED: July 11, 1959

Card 2/2

UZBEKOVA, B.R.; ALIMKHODZHAYEV, A.A.; SOSUNOVA, A.N.; LOPATUKHINA, L.G.

Bacteriological characteristics of Brucella cultures taken from people in Akmolinsk Province. Zdrav. Kazakh. 21 no.8:59-62 '61. (MIRA 14:9)

1. Iz Sredne-Aziatskogo protivochumnogo instituta (direktor - kand.med.nauk M.K.Tleugatylov).

(AKKOLINSK PROVINCE--BRUCELIA)

KISELEVA, V.M.; LOPATUKHINA, L.G.

Clinical characteristics of endogenous brucellar diseases of the anterior portion of the eyes in experimental infection in guinea pigs. Trudy Inst.kraev.pat.AN Kazakh SSR 12:81-85 '62.
(MIRA 15:11)

1. Iz kafedry glaznykh bolezney (zav. - zasluzhennyy deyatel' nauki Kazakhskoy SSR prof. V.P.Roshchin) Kazakhskogo gosudarstvennogo meditsinskogo instituta i Sredneaziatskogo nauchno-issledovatel'skogo protivochumnogo instituta (direktor - zasluzhennyy vrach Kazakhskoy SSR, kand.med.nauk R.K.Tleugabylov).
(BRUCELLOSIS) (EYE--DISEASES AND DEFECTS)

KISELEVA, V.M.; LOPATUKHINA, L.G.; USMANOVA, F.I.

Isolation of the brucellosis pathogen from the eyes of guinea pigs extraocular infection. Zh. mikrobiol. 40 no.7:120-125 Jl'63 (MIRA 17:1)

1. Iz Kazakhskogo meditsinskogo instituta, Sredneaziatskogo protivochumnogo instituta i Kazakhskogo nauchno-issledotatel'skogo veterinarnogo instituta.

LOPATYNSKA-MIKLAS, Janina

The value of teleroentgenography in the diagnosis of retrognathism.
Czas. stomat. 18 no.10:1248-1250 O '65.

1. Z Katedry Ortodoncji AM w Krakowie (Kierownik: prof. dr.
K. Dominik).

LOPATYNSKA-MIKLAS, Janina

Facial hemiatrophy and hypertrophy. Czas. stomat. 18 no. 12: 1413-1417 D '65.

1. Z Katedry Ortodoncji AM w Krakowie (Kierownik: prof. dr. K. Dominik).

HANZLIK, Janusz; TYBURCZYK, Wlodzimierz; LOPATYNSKI, Jerzy

On the effect of a brief administration of the preparation linodoxine on the behavior of some indices of lipid metabolism in the blood serum. Pol. arch. med. wewn. 33 no.5: 483-488 '63.

1. Z II Kliniki Chorob Wewnetrznych AM w Lublinie Kierownik: prof. dr med. Alfred R. Tuszkiewicz.
(FATTY ACIDS) (PYRIDOXINE) (VITAMIN E)
(BLOOD LIPIDS) (BLOOD CHOLESTEROL)
(HEART DISEASES)

L 09118-67 EWT(d) IJP(c)
ACC NR: AP7002340 SOURCE CODE: UR/0021/66/000/006/0711/0714

AUTHOR: Lopatyns'kyy, Ya. B. (Academician Academy of Sciences Ukr. SSR) 18

ORG: Moscow Institute of the Petroleum and Gas Industry (Moskovs'kyy institut naftovoyi ta gazovoyi promislovosty)

TITLE: Certain class of equations of evolution

SOURCE: AN UkrRSR. Dopovidi, no. 6, 1966, 711-714

TOPIC TAGS: mathematic operator, mathematics

ABSTRACT: Two theorems are derived which generalize the results obtained by T. Kato on equations of type

$$\frac{d}{dt}x(t) - A(t)x(t) = f(t), \quad (0 \leq t \leq T),$$

$$x\Big|_{t=0} = a$$

so that operators A(t) with variable domain of definition are included.
Orig. art. has: 5 formulas. [JPRS: 38,168]
SUB CODE: 12 / SUBM DATE: 16Sep65 / OTH REF: 001
Card 1/1 nst

0925 0630

LOFATYSHKIN, L. G.

"Stability of a Frame With Graduated Braces." Cand Tech Sci, Ural Polytechnic Inst, Sverdlovsk, 1954. (RZhMekh, Sep 54)

SO: Sum 432, 29 Mar 55

LOPATYSHKIN, L.G., dotsent, kand.tekhn.nauk

Stability of arches with superstructure. Trudy Ural. politekh. inst. no.99:23-30 '60. (MIRA 14:5)

(Arches)

LOPATYSHKIN, L.O.

Calculation of frames with steplike supports for stability beyond the elastic limit. Trudy Ural. politekh. inst. no.102: 21-27 '61. (MIRA 16:11)

133-58-5-13/31

AUTHORS: Lopatyshkin, N. M., Candidate of Technical Science, Rutes, V. S., Candidate of Technical Science and Gurskiy, G. V., Engineer

TITLE: An Investigation of the Quality of Continuously Cast Transformer Steel (Issledovaniye kachestva transformatornoy stali nepreryvnoy razlivki)

PERIODICAL: Stal', 1958, Nr 5, pp 417-425 (USSR)

ABSTRACT: In 1956-7 TsNIICHM in cooperation with Novo-Tulskiy (NTMZ) and Verkh-Isetskiy Works and later with the Urals Institute of Metals carried out a study of continuous casting of transformer steel into slabs 470 x 150 mm and blooms 200 x 200 mm. Steel was produced in 5 and 10 ton electric furnaces. Altogether nineteen heats with silicon content 4.0 to 4.5% were cast into slabs (including twelve electric heats and two convertor heats blown with oxygen) and fifteen heats with silicon content 3.0 to 3.5% were cast into blooms. In the present paper no details of continuous casting are given. The paper deals with the following problems: the quality of the surface of cast semis, cutting of semis, cooling conditions of semis, structure of semis, non-metallic inclusions and chemical

Card 1/5

An Investigation of the Quality of Continuously Cast Transformer Steel

non-uniformity of cast semis, rolling of semis into sheet billets and sheets, thermal treatment of rolled sheets and the quality of sheets. Altogether five heats were investigated. Fig.1 - changes in the crust thickness during continuous casting of slabs of transformer steel and the crystallisation front at a casting velocity of 0.7 m/min (crystalliser-mould 1400 mm long of a cross section 150 x 500 mm). A - the thickness of the crust of wide face, b - of narrow face; Fig.2 - the dependence of specific pressure on the preheating temperature of dynamo (E-11) and transformer (E-41) steels at 45% reduction; Fig.3 - the dependence of plastic properties (relative elongation and relative reduction) of transformer steel on the testing temperature; Fig.4 - the position of cold cracks in cast slabs cooled in air; Fig.5 - macrostructure of transverse templets of slabs at high (a) and low (b) casting temperatures and (c) of blooms; Fig.6 - fracture of slab; Fig.7 - microstructure of undercrust (a) and columnar (b) zones of cast slab; Fig.8 - changes in the chemical composition along the cross section of slabs; Fig.9 - distribution of non-metallic inclusions along the

An Investigation of the Quality of Continuously Cast Transformer Steel

cross section of slabs; Fig.10 - comparison of specific losses (P 10) for sheets of normal and experimental production (a and a_1); Fig.11 - comparison of plastic properties of sheets from experimental (b and g) and normal production (a); Fig.12 - structure of not annealed sheets from a cast slab; Fig.13 - structure of sheets after electro-vacuum annealing. Table 1 - the composition of non-metallic inclusions in transformer steel; Table 2 - chemical composition of tested sheets. Conclusions:
1. The possibility of continuous casting of transformer steel into rectangular and square semis without decreasing its electric properties was established.
2. Due to a high plasticity of transformer steel at temperatures above 950 to 1000°C and in view of a considerable casting velocity a partial reduction of cast semis in drawing rolls is possible.
3. The structure of continuously cast semis depends mainly on the metal temperature; globular, grainy structure without transcrystallisation zone is obtained at low casting temperatures.

An Investigation of the Quality of Continuously Cast Transformer Steel

4. Silicon ferrite is more resistant to the formation of internal and surface hot cracks during continuous casting than open hearth St.3 steel. Porosity, internal cracks and shrinkage cavities in transformer steel are welded during rolling.
5. Cast slabs should be annealed at 650 to 700°C in order to remove internal stresses and cooled slowly in the temperature range 300 to 50°C (cooling in stacks is possible). Cast square semis can be cooled and stacked (without high annealing) as they are more resistant than slabs to the formation of transverse cold cracks.
6. Flame cutting of continuously cast semis is possible only when their temperature is not lower than 300 to 400°C.
7. Mechanical properties (plasticity) of transformer sheets from continuously cast semis is higher than those made from ordinary ingots. This permits increasing silicon content of steel in cast slabs and thus improves the electro-technical properties of transformer sheets.

There are 2 tables, 13 figures and 3 references, all of Card 4/5 which are Soviet.

133-58-5-13/31

An Investigation of the Quality of Continuously Cast Transformer Steel

ASSOCIATION: TsNIIChM, Novo-Tul'skiy metallurgicheskiy zavod)
(TsNIIChM, Novo-Tulskiy Metallurgical Works)

Card 5/5

TONKAL, Yu. A.; DOBROTVORSKAYA, O.M. [Dobrotvors'ka, O.M.]; LOPATYUK, F.I.

Effectiveness of menilite shales as a new fertilizer for grain crops and sugar beets. Pratsi Inst. agrobiol. AN URSR 2 [pt. 2]:63-70 '53. (MIRA 11:7)

(Grain)
(Sugar beets)
(Shale)

LOPATYUK, I.N.

Use of dry plasma, BK-2, and hydrolysin L-103 in the compound treatment of pulmonary tuberculosis. Vrach. delo no.7:75-79 Jl'63. (MIRA 16:10)

1. Kafedra tuberkuleza (ispolnyayushchiy obyazannosti zav.-dotsent N.S.Pilipchuk) Kiyevskogo meditsinskogo instituta i kafedra klinicheskoy i laboratornoy diagnostiki (zav. - prof. I.I.Fedorov) Kiyevskogo instituta usovershenstvovaniya vrachey.
(TUBERCULOSIS) (BLOOD PLASMA SUBSTITUTES)

CZECHOSLOVAKIA

LOPAUR, F.

Faculty Apothecary (Fakultni lekarna), Brno

Bratislava, Farmaceuticky obzor, No 7, 1963, pp 309-310

"On the Preparation of Fizzing Tablets of Triflocide in the Apothecary."

CZECHOSLOVAKIA

LOPAUR, F.

Faculty Pharmacy (Fakultni lekarna), Brno

Bratislava, Farmaceuticky obzor, No 2, Feb 1966, pp 71-72

"Tablets for rapid detection of some anti-tubercular medicaments in the urine, for orientation purposes."

CZECHOSLOVAKIA

LOPAUR, F.

No affiliation given

Bratislava, Farmaceuticky obzor, No 1 [Jan] 1967, pp 44-45

"Control of mass-produced pharmaceutic preparations through the use of the senses (color, smell, etc.)."

LOPAVOK, V. S.

1c

L 39268-65 EWG(r)/EWT(l)/EWG(m)/T-2 Pz-6
ACCESSION NR: AP5007513 S/0286/65/000/004/0121/0121

AUTHORS: Sokolov, G. I.; Frank, M. Ta.; Ilupina, N. A.; Adler, M. V.; Lovchev, S. V.; Lopavok, V. S. 23

TITLE: Turborefrigerator for cabin air conditioning systems in large passenger aircraft. Class 62, No. 153845

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 4, 1965, 121

TOPIC TAGS: passenger aircraft, air conditioning equipment

ABSTRACT: This Author Certificate presents a turborefrigerator, consisting of a turbine and compressor, for cabin air conditioning systems in large passenger aircraft. To insure forced circulated lubrication of the shaft bearings, the oil feed system is provided with an oil turbopump mounted in the end of the air-cooled oil tank which is located below the turborefrigerator. The turbopump, rotated by compressed air withdrawn from the inlet nozzle of the turborefrigerator, is provided with throttles controlling the oil flow. The pump is connected by tubes with the oil feed channels to the bearings and the annular cooling chambers of the bearings.

ASSOCIATION: none

Card 1/1

LOPAY, S.D., inzhener.

Tracklaying with a caterpillar tracklayer. Transp. stroi. 7 no.2: 11-14 F '57. (MLRA 10:4)

(Railroads--Track)

LOPAY, S.D., inzhener.

"Engineering regulations for laying and ballasting railroad track" compiled by A.G.Gornyi, V.A.Selivon, and A.D.Shabanov. Reviewed by S.D.Lopai. Trans.stroi. 7 no.4:31-32 Ap '57. (MIRA 10:10)
(Railroads--Track) (Ballast (Railroads))

Lopay, S.D.

LOPAY, S.D., insh.; CHISTYAKOV, G.N., insh.

Using double-cantilever gantry cranes in railroad construction. (MIRA 10:11)
Transp.stroi. 7 no.6:28-29 Je '57.
(Cranes, derricks, etc.) (Railroads--Construction)

PETROV, V.I., insh.; LOPAY, S.D., insh.; CHISTYAKOV, G.N., insh.

"Over-all mechanization in gravelling railroad tracks" by A.K. Nikol'skii. Reviewed by V.I.Petrov, S.D.Lopai, G.N.Chistiakov. Transp. stroi. 8 no. 6:30-31 Je '58. (MIRA 11:7)
(Railroads--Track)

KONDRASHOV, D.S., inzh.; LOPAY, S.D., inzh.

Preliminary gravelling operations in constructing upper layers of railroad tracks. Transp.stroi. 9 no.8:16-18 Ag '59. (MIRA 13:1)

(Railroads--Track)

LOPAY, Semen Densiovich, inzh.; REPREV, Andrey Ivanovich, kand. tekhn. nauk; KONDRASHOV, Dmitriy Sergeyevich, inzh.; BIRYUKOV, V.D., inzh., retsenzent; NALICHAYEV, V.N., inzh., retsenzent; SURODEYEV, V.P., inzh., red.; KHITROVA, N.A., tekhn. red.

[Over-all mechanization of ballasting operations]Kompleksnaia mekhanizatsiia ballastirovochnykh rabot. Moskva, Transzheldorizdat, 1962. 175 p. (MIRA 15:12)
(Ballast (Railroads)) (Railroads--Equipment and supplies)

BELAN, I.A., inzh.; LOPAY, S.D., inzh.

Erecting pile foundations for metal abutments with arched cross beams. Transp. stroi. 14 no.4:10-12 Ap '64. (MIRA 17:9)

IOPAY, S.D., inzh.

Combined laying of the superstructure. Transp. stroi. 13 no.1:
11-13 Ja '63 (MIRA 18:2)

STEPANOV, V.V.; LOPAYEV, B.Ye.; SHTENGEL'MEYYER, S.V.

Viscosity of fluxes used in electric slag remelting and heating. Avtom.svar. 18 no.11:28-30 N '65. (MIRA 18:12)

1. Ural'skiy politekhnicheskiy institut im. S.M.Kirova (for Stepanov, Lopayev). 2. Institut metallurgii im. A.A.Baykova (for Shtengel'meyyer). Submitted October 13, 1964.